

Pest Update (August 4, 2010)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insect from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem instead. **Walnut samples may not be sent in from any location – please provide a picture instead.**

Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Current concerns



Bacterial blight on lilacs continues to appear around the eastern half of the state. I have received numerous calls from producers concerned about the lilac row in their belts. The typical symptoms are blackening leaves and a curled shoot tips – it almost appears as fire blight. The disease starts out in the spring as merely small brown spots throughout the leaf blade that enlarge by early summer to encompass the leaf. As the spots enlarge the leaf also may become distorted. Usually by now the leaves are almost completely black, wilted and drying, again similar to the symptoms expressed by fire blight. One reason for the similarity of symptoms is that the blight on lilacs is also due to a bacterium; however this one is in

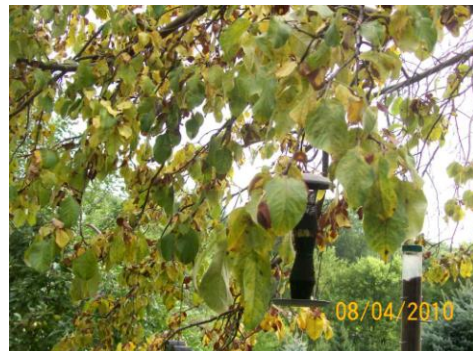
the genus *Pseudomonas*. The best control for diseased lilacs at this time is prune the stems back to at least 1 foot below any symptoms. I prefer on small plants (those less than 5 feet tall) to just prune back the entire plant to within 3 inches of the ground during the dormant season (late October through late March). Regardless of how you prune away infected shoots, be sure to treat the tools with a spray of Lysol Disinfectant between cuts to avoid spreading the disease. The plants can also be treated with a copper fungicide in the spring at bud break.

E-samples



Cedar-apple rust is showing up on apple trees across the state though the symptoms are easily confused with other problems. This is a good picture of the disease sent in by Ruth in Stanley County and you can see the light spots with the darker center. I stopped to look at this tree in Fort Pierre last week and the aecia were visible on the underside of

the leaves (it appears as a fuzzy spot). Cedar-apple rust also can appear as necrotic lesions on a yellowed leaf. Cindy sent in a picture, then a sample, from a tree exhibiting these symptoms of cedar-apple rust. The necrotic spots are actually a resistance response to the disease. Cedar-apple rust is probably more common this year due to the continually wet weather much of the state



has experienced since May. Treatment for the disease is an application of a product such as Immunox that contains myclobutanil as the active ingredient. Applications begin as the leaves start to expand out of the bud and should continue every seven to ten days until mid-June. Captan, one of the most common fungicides sold is not effective against cedar-apple rust hence what many homeowners use to treat apple scab, one of the most common diseases of apples and crabapples will not provide much protection from rust.

Samples received

Clark County

What is wrong with Ron's pear tree?

The branches appear to be dying and it is now spreading to other branches.

This is fire blight, probably the most common problem with growing pears in South Dakota (other than our winter weather). The disease which results in wilting and blackening leaves and shoots is often fatal to pears. The best control is to prune out infected branches to at least a foot or more beyond any symptoms (dying tissue) but still make the cut at a junction where the branch connects with the trunk – do not leave a stub. Be sure to spray the hand saw or pruners with Lysol Disinfectant between cuts to avoid spreading the disease further and do the pruning as soon as we have a stretch of dry weather, at least a week. Do not apply any sealer or wound dressing to the pruning wounds.

Douglas County

What is causing the needle browning

on this pine and spruce?

I cannot tell from the sample but will come down this week to look at the trees.

Gregory County

What is wrong with this cotoneaster?

The plant has fire blight, a bacterial disease that is very common on cotoneaster as well as apple and pear. The typical symptoms on cotoneaster are yellowing and wilting leaves along with blackened shoot tips that are sometimes curled into a crook. The best control for fire blight on cotoneaster is to cut the plant to within three inches of the ground during the dormant season. Usually the new shoots that arise from the cuts are disease-free and the plant resumes its normal growth. I realize if this is a long belt the work will take awhile but the results are worth it. Also remember to clean the pruners with Lysol Disinfectant as you move from plant to plant to avoid further spreading the disease.

Hutchinson County
plant?

What is wrong with this raspberry

The same problem my raspberry plants have – anthracnose. This disease causes the leaves to yellow, then brown and turns crisp along the margins before falling. Usually you can also find a purplish-red lesion near the base of the cane. The only control is prune back all infected canes to about 1 inch tall, destroy

these prunings and also rake up and destroy all fallen leaves. A lime sulfur spray should be applied next spring just as before the canes begin to leaf out next spring.

Lake County

What is wrong with Lowell's hackberry tree? It barely had any leaves this spring and those turned brown.

The leaves were infested with hackberry nipple gall but that would not cause the rapid decline of the tree. The tree is clearly dying as the sapwood beneath the bark is turning brown as well and the buds have died. I cannot tell why from the sample. It may be environmental, some change to the rooting area, or this may be the somewhat mysterious decline we saw in hackberries about ten years ago that seems to be reappearing now. The decline that occurred in the late 90s killed hackberries throughout the southeastern part of the state as well as states to the south. No one ever figured out exactly why the trees died but the problem seemed to disappear on its own only to show up again this year.

Potter County

What is wrong with this pine? The tips of the needles are browning.



The browning and banding of pine needle tips is often associated with dothistroma needle blight. While the trees are afflicted with this disease, the extensive dieback to me indicates that other problems may be contributing to the decline. You probably want to see if there are globs of pitch (resin) on the trunk near the junctions with the branches. If these are visible then Zimmerman pine moth is infesting the trees. This is the most likely possibility but not the only one. Nothing ever says a tree can only have one problem at a time! Controlling the needle blight requires spraying a copper containing fungicide as the new growth expands (about mid-May) and a second application

in late June. No control is effective at this time of year.

Sully County

What are these insects found in the ash tree?

These small dark insects are the ash bark beetle. They commonly infest dying branches or trees and usually are an indication the tree is stressed rather than being the primary stress agent. No control is recommended but if they are found in and on a tree you might want to find out what is stressing the tree and making it more attractive to the beetles.

Union County

What is wrong with Scott's spruce tree? The needles are turning brown.

The tree is producing normal shoot growth and the needles are the proper length. The discoloration may be due to wet soils but certainly is due to some environmental factor. I'll have to stop and look at the tree in a week.

Yankton County
tree?

What is wrong with Keith's apple

See the e-sample section for more information on the chlorosis. This is actually related to cedar-apple rust. The tree also has apple scab.

Yankton County

What is wrong with this 40-year old silver maple? It is dying back in sections.

Since I have only seen printed pictures of the tree it is hard to make a good diagnosis but the pattern of decline is consistent with what I frequently see with verticillium wilt. If you can check the sapwood of a branch with wilting leaves you should have a green streaking if verticillium is present. This not a 100 percent clue but it is very common in infested trees. There is no control for the wilt disease other than removal of dying branches and otherwise maintain tree health by watering during dry periods (not likely to be needed this year!).